https://doi.org/10.18549/PharmPract.2022.2.2659

Original Research

Distress symptoms during the COVID-19 lockdown: A study with the general population of the United Arab Emirates

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Received (first version): 31-Mar-2022

Accepted: 29-Apr-2022

Published online: 03-May-2022

Abstract

Background: Since the declaration of the COVID-19 pandemic, the United Arab Emirates (UAE) government has taken a series of preventive measures to control the spread of the Coronavirus. Dealing with the unforeseen challenges caused by the pandemic has had a profound impact on people all around the world. Pharmacists played an important public health role during the COVID-19 pandemic, and they were the first point of contact with the public and the first source of information, providing accurate and reliable management and preventive measures. The aim of this study was to analyse the distress symptoms and the associated factors among a sample of the UAE population. **Materials and Methods:** This was an observational cross-sectional study conducted over the period of September to October 2020. A bilingual online self-administered questionnaire was distributed among individuals aged 15 years and above. Data was analyzed using Statistical Package for Social Sciences (SPSS). **Results:** Most of the students in the sample found online learning less effective than in-class learning. Among these, 49.9% and 62.8 % reported that they had normal sleep and eating habits, respectively. In all the sample, most of the participants (96%) were adherent to preventive measures. Higher levels of distress during the COVID-19 lockdown were found among females, individuals younger than 35 years old, those who neglected personal hygiene and who had worse quality of family gatherings and relationships. **Conclusion:** This study identified factors associated with distress symptoms experienced by people during the lockdown and perceived attitudes regarding online learning, preventive measures and changes in people's behaviours and family environment. Knowledge about how lockdown has affected the lives of the populations can be used to design public health interventions aimed at promoting the health and well-being of the communities.

Keywords: COVID-19 pandemic; Distress symptoms; Online learning; Mental health; United Arab Emirates

INTRODUCTION

The COVID-19 pandemic has necessitated enormous changes in people's daily routine and lifestyle, with an impact on the behavior, social interaction and health of the population

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Mohammed M HASSANEIN. Department of Pharmacy Practice and Pharmacotherapeutics, College of Pharmacy, University of Sharjah, University City Road - University City, PO Box 27272, Sharjah, United Arab Emirates. mohammed. magdyhassanein@outlook.com worldwide. Globally, over 433 million confirmed cases and over 5.9 million deaths have been reported as of 6 March 2022.² In the UAE, there have been 884,354 confirmed cases of COVID-19 and 2,302 deaths.³ To avoid the widespread of the virus, governments adopted restrictive public health measures that have imposed modifications in work organizations, schools and the lives of individuals and families in general. Since the outbreak of COVID-19 in March 2020, the UAE government has put into practice several immediate measures to control its spread. The designated "lockdown period", considered for this study from March until August 2020, included the closure of all public and private schools, higher education institutions, where in-class was replaced by distance learning. Moreover, prayers in all worship places were suspended, shopping centers and entertainment destinations closed, and flights suspended while working was permitted remotely.⁴ During this period, the population was urged to stay at home and to go out only to fulfill absolute necessary needs as buying essential items like food and medicine or to perform essential jobs.⁴

The lockdown measures were essential to reduce the number of infections as at that time the healthcare systems were not fully prepared to receive higher number of COVID-19 patients and vaccines were not available to promote herd immunity.² However, these measures had a detrimental impact on the mental health of the populations. Higher levels of anxiety symptoms, depression, psychological distress and stress were detected in excess of pre-pandemic levels as a consequence of the several social restrictions, the fear of contracting the virus, and the various challenges posed by the global lockdown.



https://doi.org/10.18549/PharmPract.2022.2.2659

These were reflected in increased feelings of frustration, boredom, anger, anxiety, loneliness, and helplessness.^{6,7} Several factors contribute to explain the worsening of mental health of individuals during this period. The reduction in the number of social interactions through family, friends/ neighbors or entertainment in general led to a lower life satisfaction.⁷ Moreover, the drastic economic consequences, with many people losing their jobs and struggling to fulfill their daily needs and those of their families.⁵ Additionally, the majority of governments have closed schools and universities, with an impact on the formal education itself and also on how families could adapt to accommodate remote work of parents and online teaching of their children.^{5,8} Challenges as poor internet access, laptop shortages, difficulty in understanding digital admission processes, lack of self-motivation to study were observed across countries.9 In this context, screentime activities increased due to online schooling, online socializing and limited non-screen-based activities, physical exercise and social interactions were very abundant.8 Data from the Health Behavior in School-aged Children study, in Czech Republic, showed that about one third of the students reported economic and psychosocial disruptions to their family life during lockdown, but that 79% also indicated that they had positive opportunities for family interactions or learning new contents.8

Pharmacy professionals are considered essential partners in response to the COVID-19 pandemic. Pharmacists practicing in the UAE were reported to have a pivotal role in combating the spread of infection, they showed good and appropriate levels of knowledge about COVID-19 transmission, symptoms, and risk factors and high levels of preparedness to counsel and educate the public on different preventive and management measures.^{10,11} Community pharmacists, in particular, were the first-line healthcare providers for a major portion of the public as they were the most accessible among other healthcare providers and people were trying to avoid hospitals as possible as they could because of the fear of catching the infection.

The research on the impact of COVID-19 pandemic on mental health and well-being is limited in the UAE.^{12,13} These recent studies reported higher levels of anxiety and depression than those reported in previous pre-pandemic national studies and that a majority of the participants felt horrified, apprehensive or helpless due to COVID-19.^{12,13} Factors that were statistically significantly associated with both depression and anxiety: young age, being female, being a part-time worker, a college or University graduate, having a history of mental health problems, self or loved ones testing positive for COVID-19, and having high levels of COVID-19 related anxiety and economic threat.^{12,13} Knowledge about how lockdown has affected the lives of the general population in the UAE is relevant to design public health interventions aimed at promoting health and well-being and preventing negative health outcomes arising from this restrictive period. Thus, this study aimed to analyse distress symptoms during the lockdown in a sample of the general population of the UAE, as well as the factors associated with distress, including sociodemographics, and changes in own behaviors and family environment.

METHODS

This was an observational cross-sectional study conducted over the period of September to October 2020. The sample is comprised of 471 participants across all emirates in the UAE. A questionnaire was distributed online via social media and private social networks (WhatsApp, Facebook, and Instagram). All individuals aged 15 years and above, who understood either English or Arabic, were eligible to participate. The instrument was developed based on existing literature about the impact of COVID-19 in several dimensions of individuals' life, such as work, education, mental and physical health, and people's adoption of protective behaviors. It is a multi-item questionnaire built by a group of researchers in pharmacy, public health, in addition to other medical professionals. The survey was pilot tested in a sample of the public to assess face validity and ensure understandability of the survey questions. As a result, changes were made to the survey: question rephrasing was conducted for better intelligibility, and additional questions in the 'Online Education' section of the survey were added to better understand the perceptions of the participants. The final version of the questionnaire had 54 items, across six domains:

Sociodemographic characteristics, including age, gender, marital status, number of children, number of bedrooms in the house, educational level, and employment status.

Online education, including items about the differences between online and in-class learning, and their advantages and disadvantages.

Job's duties/work, including how COVID-19 has affected job's duties; discharges; individual protection equipment required to be worn at work; whether they had to work from home or not; and which was more productive working from home or at the office.

COVID-19 infection and other diseases, namely presence of any chronic diseases; and whether the participant or their family members were infected by COVID-19.

Distress, where the participants were asked about the perceived changes occurring since the lockdown regarding anxietyrelated symptoms, as for example, problems in concentrating, irritability and loss of energy, feelings of helplessness and hopelessness, feeling agitated and nervous. Respondents were asked if they have perceived changes in these feelings in a three categories scale: never, always, sometimes. Items regarding sleep pattern, weight and appetite were answered in a scale with three categories: normal, increased or decreased.

Family relations, usage of devices, hygiene, as well as the presence of anxiety and depression symptoms.

Perceived changes in own behavior and family environment during the lockdown, in which the participants were asked about the use of protective devices, how lockdown had influenced their personal hygiene, time using smart devices, and family environment, including parental supervision, family gatherings at meals, and relationship with family and children. Participants were required to categorize the perceived changes in these areas as: normal, improved, or worse. The



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questionnaire took on average 10 minutes to complete.

The study was approved by the Research Ethics Committee of the University of Sharjah (reference number REC-20-07-21-01. The self-administered bilingual questionnaire (Arabic and English) was built in Google forms. The first potential participants were invited by convenience, through the personal contacts of the research team. Participants were asked to then forward the survey link to their contacts, following a snowball sampling strategy. The exclusion criteria included being younger than 15 years old and having a language barrier (not understanding Arabic or English). The invitation e-mail included the link to the questionnaire and information about the study aims, methodology, eligibility to participate, time to fill in the questionnaire and ethical measures adopted, guaranteeing their voluntary participation, anonymity and confidentiality of the data shared with the researchers. Consent to take part in the study was requested in the first page of the online questionnaire (submitting the survey was considered a signature). Respondents had no incentive to participate and were able to guit the study at any point of the questionnaire.

Statistical analysis

Descriptive statistics were performed to characterize the sample and describe students' opinions about online learning, the perceived changes in distress symptoms, their own behavior and family environment during the lockdown. The differences in distress symptoms (main outcome of the study) according to sociodemographic characteristics, perceived changes in own behavior and family environment were calculated using T-test for independent samples or One-Way ANOVA, as appropriate. A generalized linear model was then calculated to determine the predictive variables of an increased distress during lockdown. Beta (β) and the respective 95% confidence intervals (95% CI) were presented. This model included all the participants with available data on the variables which showed a statistically significant association with distress symptoms in the bivariate analysis. Two variables related to parental supervision and relationship with children were excluded from the model, because only participants with children were eligible to reply to these items (n=194) and we were interested in analyzing distress in all the sample. For the model analysis, a composite measure of the outcome (distress) was created. The 11 distress symptoms assessed, categorized as 1 – Never, 2 – Sometimes, and 3 – Always, were summed up and the total score was used. Higher values indicate higher perceived distress related to lockdown. The analyses were performed through the IBM Statistical Package for the Social Sciences (SPSS) Statistics for Windows, version 27.0, Armonk, NY, USA. Statistical significance was defined as p < 0.05.

RESULTS

Most respondents were females (76.2%), between 15-34 years old (66.5%) and had a higher than school education level (82.6%) (Table 1). The majority did not have children (58.8%) and did not have any chronic disease (87.8%). Regarding the employment status, 30.8% were employed, 24.6% were unemployed or retired (3.6% were laid off after COVID-19) and



44.6% were students (35.9% were university students). In the total sample, 1.3% had been infected with COVID-19 and 21.4% had a relative who had the infection.

Students' opinions about online learning

Most students considered that online learning was less useful than in-class learning (69.0%). The main disadvantages of the online learning were the fact that students paid less attention during online lectures (80.5%), they felt that this model of education facilitated cheating and dishonesty in exams (6.7%), and that quizzes and exams had a tight time to be completed (5.2%). More than half of the students reported that the environment at home was not suitable for classes (58.1%); a

Table 1. Sociodemographic and health c (N=471)	haracteristics of the participants
Characteristics	Total
	n (%)
Gender	
Male	112 (23.8)
Female	359 (76.2)
Age	
15-34	313 (66.5)
>34	158 (33.5)
Marital status	
Single, divorced, widow	257 (54.6)
Married	214 (45.4)
Educational level	
≤High school	82 (17.4)
>High school	389 (82.6)
Employment	
Employed	145 (30.8)
Unemployed/retired	99 (21.0)
Student	210 (44.6)
Discharged after COVID-19	17 (3.6)
Number of children	
None	277 (58.8)
1-2	97 (20.6)
≥3	97 (20.6)
No. of bedrooms	
1-3	354 (75.2)
≥4	117 (24.8)
Chronic disease	
Yes	57 (12.2)
No	412 (87.8)
COVID-19 infection	
Own infection	6 (1.3)
Relative's infection	101 (21.4)
No infection	364 (77.3)

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few pointed out problems with internet connection (18.1%), and shortages in the number of devices available at home to be connected to internet during the school time was emphasized by 8.1%. The main advantages of the online learning were having recorded lectures that can be revised later on (79.5%), the possibility of learning while relaxing (12.9%) and also economic reasons, as less expenses by staying longer time at home (5.7%). Students felt that their academic performance during online assessments was the same compared to in-class assessments (43.3%) (data not shown).

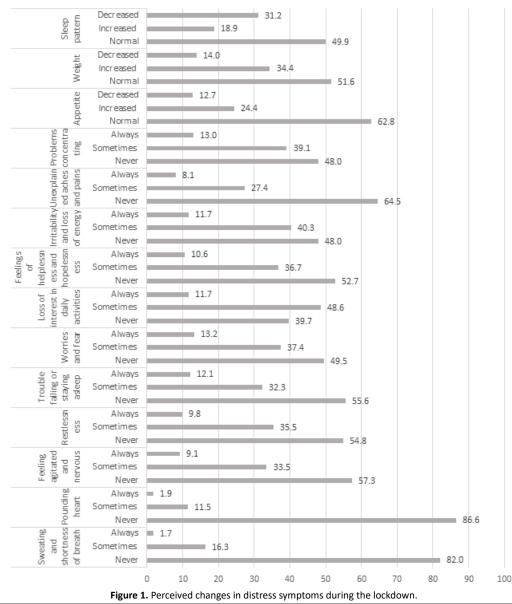
Perceived changes in distress symptoms during the lockdown

Most of the participants reported a normal sleep pattern during lockdown (49.9%) and not having trouble falling or staying asleep (55.6%), although 31.2% reported a decrease in the number of hours slept (Figure 1). Most participants reported to have a normal appetite (62.8%) and did not have unexplained aches and pains (64.5%). However, more than one third

described an increase in their weight (34.4%), and sometimes having loss of interest in daily activities (48.6%), irritability and loss of energy (40.3%), problems in concentrating (39.1%), worries and fear (37.4%), and feelings of helplessness and hopelessness (36.7%). Some reported feeling agitated and nervous sometimes (33.5%), although the majority reported never feeling pounding heart (86.6%) or sweating and shortness of breath (82.0%).

Perceived changes in own behaviors and family environment during the lockdown

The great majority of participants used mask outside home (96.0%) and left home only if necessary (36.9%) or 1-2 times/ week (35.9%) (Figure 2). In general, most individuals reported to have felt more nervous and depressed than before lockdown (71.7%). The duration of using devices has increased for 81.7% of the participants, while 31.3% reported to have overdone personal hygiene. Regarding the family environment, most



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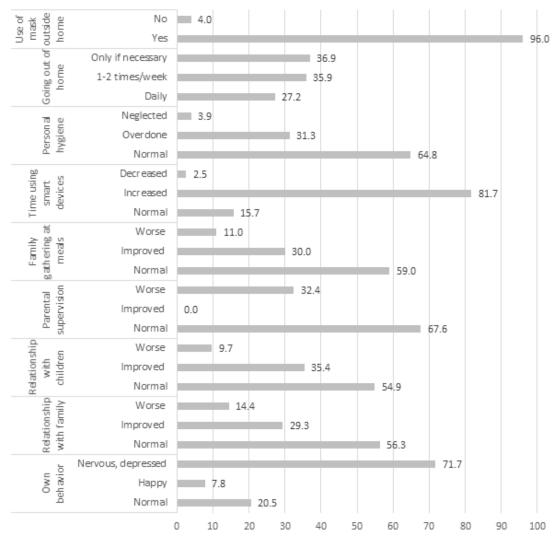


Figure 2. Perceived changes in own behaviors and family environment during the lockdown.

reported to have normal family gatherings at meals (59.0%), although 30.0% described it became worse. The same pattern was observed in parental supervision, with 67.6% of the participants reporting it as normal, 32.4% as worse and none reported that it was improved. On the other side, relationship with family and children has improved in about one third of the sample (29.3% and 35.4%, respectively), being described as normal by the majority of the participants in our sample (56.3% and 54.9%, respectively).

Differences in distress according to sociodemographic characteristics, use of protective measures and perceived changes in own behavior and family environment during lockdown

Higher levels of distress were found among females (p<0.001), younger individuals (15-34 years old, p<0.001), single, divorced or widowed (p=0.012) students when compared with employed and unemployed participants (p=0.004) and those who left home only if necessary, compared to those who left home daily (p=0.017) (Table 2). Regarding differences in the

levels of distress according to own behavior, higher distress was found among those whose personal hygiene started to be neglected after lockdown (p=0.002), those who increased the use of smart devices (p=0.002), and those who reported to feel more nervous and depressed (p<0.001). Concerning the family environment, higher levels of distress were found among those whose family gatherings at meals were worse (p<0.001), who reported also a worse relationship with family (p<0.001) and with children (p<0.028), compared to those whose parental supervision was worse (p<0.001).

Predictors of distress during lockdown

Results from the generalized linear model showed that, after adjustment, higher levels of distress were predicted by being a female (β =1.704, p=0.005), being younger than 35 years old (β =2.681, p=0.022), neglecting personal hygiene (β =3.494, p=0.003), feeling nervous and/or depressed (β =1.907, p=0.002), having worse family gatherings at meals (β =1.616, p=0.040), and a worse relationship with the family (β =1.901, p=0.007)



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	Distre	ess
	M (SD)	p
Gender		
Male	3.74 (4.29)	<0.001
Female	6.23 (5.49)	
Age		
15-34	6.76 (5.75)	<0.001
>34	4.69 (4.76)	
Marital status		
Single, divorced, widow	6.19 (5.64)	0.012
Married	4.98 (4.87)	
Educational level		
≤High school	6.68 (5.38)	0.056
>High school	5.42 (5.31)	
Employment		
Employed	4.71 (5.02)*	0.004
Unemployed/retired	4.97 (4.83)*	
Student	6.64 (5.71)*	
Discharged after COVID-19	5.47 (4.27)	
Number of children		
None	5.93 (5.57)	0.092
1-2	5.87 (5.24)	
≥3	4.59 (4.61)	
No. of bedrooms		
1-3	5.60 (5.27)	0.786
≥4	5.76 (5.55)	
Chronic disease		
Yes	6.12 (5.55)	0.434
No	5.51 (5.24)	
COVID-19 infection		
Own infection	4.67 (4.93)	0.463
Relative's infection	6.20 (5.46)	
No infection	5.50 (5.31)	
Going out of home		
Only if necessary	6.21 (5.72)*	0.017
1-2 times/week	5.91 (5.24)	
Daily	4.52 (4.76)*	
Use of mask		
Yes	5.63 (5.38)	0.877
No	5.79 (4.14)	
Personal hygiene		
Neglected	10.11 (6.89)*	0.002
Overdone	5.85 (5.20)*	
Normal	5.48 (5.18)*	

Time using smart devices		
Decreased	6.58 (5.45)	0.002
Increased	6.00 (5.45)*	
Normal	3.62 (4.19)*	
Own behavior		
Nervous, depressed	6.66 (5.52)	<0.001
Нарру	3.00 (3.60)	
Normal	3.63 (4.21)	
Family gathering at meals		
Worse	8.82 (6.61)*	<0.001
Improved	5.17 (4.44)*	
Normal	5.34 (5.25)*	
Parental supervision		
Worse	8.73 (6.24)	<0.001
Improved	-	
Normal	5.09 (4.99)	
Relationship with children		
Worse	7.50 (4.68)*	0.028
Improved	4.38 (4.50)*	
Normal	5.76 (5.67)	
Relationship with family		
Worse	8.63 (5.47)*	8.63 (5.47)*
Improved	5.07 (4.57)*	
Normal	5.17 (5.43)*	

Notes: M=mean, SD= Standard Deviation, *Significant intergroup differences

(Table 3). Both the increase and the decrease of the time using smart devices appeared to be associated with higher distress (β =1.597, *p*=0.016 and β =3.746, *p*=0.017, respectively).

DISCUSSION

The COVID-19 pandemic has led to the implementation of unprecedented measures of lockdowns, quarantines, and social distancing. Governmental decisions around the world to take such measures were in the efforts to contain the spread of COVID-19. However, such a rapidly evolving situation has impacted and altered people's lives at different levels, and several reports indicated an increase in psychological distress experienced by the general population. Considering the scarcity of research on the impact of COVID-19 pandemic on mental health and well-being in the UAE, this study contributed to increase the knowledge on how the lockdown period has affected the lives of the general population, namely students and the working population. Results from this study can be used when developing public health interventions aimed at promoting the health of the populations.

Among the precautions that authorities had taken, was a shifting from in-class to the online learning.^{14,15} Our survey found that most students did not find online learning useful for



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Variable	Distress		
	Coefficient	p-value	
Gender			
Male	1		
Female	1.704	0.005	
Age			
>34	1		
15-34	2.681	0.022	
Marital status			
Single, divorced, widow	1		
Married	0.141	0.868	
Employment			
Employed	1		
Unemployed/retired	-0.988	0.154	
Student	-1.188	0.286	
Discharged after COVID-19	0.905	0.533	
Going out of home			
Daily	1		
Only if necessary	0.071	0.914	
1-2 times/week	0.528	0.416	
Personal hygiene			
Normal	1		
Neglected	3.494	0.003	
Overdone	0.613	0.242	
Time using smart devices			
Normal	1		
Increased	1.597	0.016	
Decreased	3.746	0.017	
Own behavior			
Normal	1		
Nervous, depressed	1.907	0.002	
Нарру	-1.259	0.212	
Family gathering at meals			
Normal	1		
Improved	0.508	0.365	
Worse	1.616	0.040	
Relationship with family			
Normal	1		
Improved	-0.475	0.410	
Worse	1.901	0.007	

many reasons, most importantly, students paid less attention during classes and did not find home to be an adequate and suitable learning environment. The substitution of face-to face interaction with instructors with the virtual meetings and classes and the challenges faced by students to understand assigned topics without having their instructors being around, were additional reasons why students found distance learning not the perfect mode of learning.¹⁶⁻¹⁹ Moreover, respondents felt that such environment encouraged cheating behaviors and dishonesty, with the lack of close supervision and guidance and the tight time to complete quizzes and exams. This shed a light on the need to revise the methods employed in the assessment of the student's academic performance. In addition, another emerging challenge is that the current technologies and infrastructure are not mature enough to ensure integrity and credibility of the assessment systems in place.¹⁶ A similar case for a declining work productivity because of lack of resources, human connectivity, and supervision.

On the other hand, having the lectures recorded where students can refer to them anytime was one of the main advantages experienced by them, besides location flexibility and being able to attend classes anywhere. Other studies conducted in the United Arab Emirates and in other Asian and African countries reported that online learning was effective because it saved time, effort, and money without the need to travel to campus and the flexibility of attending classes from anywhere.¹⁷⁻¹⁹ Few studies also had found that blended learning is more preferred by students and teachers than completely online education.¹⁶⁻¹⁸ Therefore, teachers and students, should be re-introduced to the techniques of the online learning to adapt an early mindset that prepare them and facilitates the engagement of both students and their teachers.

The pandemic also had a huge impact on the mental health of the public, not only due to the fear of infection, but also due to the lockdowns, restrictions on travelling, as well as a decrease in job opportunities. We found that only one third of our study respondents reported that their sleeping quality and eating habits were affected by the lockdown and precautionary measures and few experienced slight changes in sleeping hours and appetite. Anxiety and agitation were experienced by others; however, these feelings were never translated to any clinical symptoms such as pounding heart, sweating or shortness of breath. Despite the fact that precautionary measures of social distancing and home confinement were effective in reducing the number of infected people, they have had a major impact on the physical activity, eating and sleeping habits of the population. People were expected to sit longer times than usual in front of digital screens, studying, or working. This lack of physical activity, the sedentary lifestyle and the increased usage of smart devices had impacted the mental health on different levels.

Our results did not differ much from other studies that included people from different countries and examined how mental health, sleep quality and eating habits of both infected and non-infected participants were affected by lack of physical activity during the period of lockdown. We also found that being a female increased the risk of detrimental effects on mental health and were exposed to a greater psychological distress from the COVID-19 outbreak.²⁰⁻²⁵ Most of the respondents were engaging in health protective behaviors, such as wearing masks, leaving home for emergencies only, getting tested despite exhibiting no symptoms, as well as taking vitamins. Public engagement with health protective behaviors



was highlighted as an effective and critical strategy to help control the transmission of COVID-19 virus.^{21,26} The perceived risk, adequate knowledge about the virus and perception that protective measures can affect the spread of the virus have all been reported to be contributing factors to such engagement.^{21,27} Additionally, because of the mandatory mask wearing in several public places, the general population grew accustomed to them. This should be perceived as a positive indicator of future public adherence and engagement to any potential virus outbreak. Moreover, our respondents reported taking antibiotics, influenza vaccines, hot drinks, and garlic as precautions against COVID-19, despite reporting to trust announcements from the WHO and the Ministry of Health and Prevention which have debunked them as baseless allegations. Other published studies have also shown that a sizable portion of their participants were misinformed about the appropriate precautions to take against COVID-19; being unsure if vitamins are effective in protecting against COVID-19 and believing eating well-cooked meat is not safe during the pandemic.^{26,27} Therefore, governments and health organizations should take greater efforts to better promote health and educate the public in a more concise and responsible way.

COVID-19 crisis has challenged healthcare services and healthcare workers were key players to the continued efforts to control the spread of the infection. Along with doctors and nurses, pharmacists were uniquely positioned as a rapid and accessible point of patient care, providing reliable information to the community, ensuring medication safety, educating patients on preventive measures. They were perceived as a trusted source of health information related to COVID-19 infection. This perception arose from the high COVID-19 knowledge that pharmacists and other allied healthcare providers had developed. Government media briefings, use of multiple reliable medical platforms, scientific journals and training and awareness programs, all of these resources have helped in enforcing the proper knowledge. Proper utilization of the services that community pharmacists can provide can complement the services provided by physicians and allied healthcare providers, saving costs and time and relieving pressure on healthcare systems.^{10,28}

A recent study in Ireland has indicated that during the COVID-19 era, the role of the pharmacists in the community has been greatly evolved and pharmacists were recognized as frontline essential professionals. This evolution was a necessary adaptation to the magnitude of the COVID-19 pandemic problem worldwide. Vulnerable population like people with mental health conditions were hard hit by this pandemic and pharmacists in the community played a crucial role in minimizing the adverse outcomes among this population sector.²⁹

Another recent study in the United States has also demonstrated that during the COVID-19 pandemic, the role of pharmacists in the country has been extended to include administering vaccination to the public to fight the infection in addition to their https://doi.org/10.18549/PharmPract.2022.2.2659 everyday roles of maintaining drug-supply chains, delivery of telepharmacy services, ambulatory pharmacy services, triage, reporting and referring of COVID-19 cases, patient education and dispelling of misinformation. They also reported that there is a significant role of the community pharmacists in speeding up the lifting of the lockdown. Many studies around the world were consistent with the above-mentioned findings regarding the important role of the community pharmacists during the pandemic and the lockdown.³⁰

Based on such previously mentioned observations, the role of pharmacists here in the UAE can also extend in consistence with the rest of the world to tackle the COVID-19 pandemic and minimize the bad consequences on the society. These evolving roles of the pharmacist can also be useful post COVID-19 as to confront any future infections or pandemics. Consequently, we propose that a future study of the role of community pharmacists in the UAE to help minimize the detrimental effects of a problem with the magnitude of COVID-19 pandemic which may arise in the future would be of great importance. Even though our study has not shown a great deal of psychological impact on the chosen sample as most of the respondents have not shown any anxiety or distress but less productivity at work and schools were very evident.

CONCLUSION

General negative perception of shifting to online learning/ working and a decreased engagement and productivity among students and professionals were observed. Sleep and eating habits and quality were not highly affected by the lockdown and no profound symptoms of anxiety and depression were observed among most of the participants. The public projected a positive engagement with precautions and health protective behaviors.

FUTURE STUDY

A future study to explore the role and the status of community pharmacists in minimizing the detrimental outcomes of COVID-19 pandemic and the lockdowns on the UAE population is highly recommended in consistence with many studies that were carried out in the rest of the world.

DISCLOSURE

The authors have no conflicts of interest associated with the material presented in this paper.

FUNDING

No financial support to disclose.



https://doi.org/10.18549/PharmPract.2022.2.2659

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